

1 THE HONORABLE THOMAS S. ZILLY  
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6 U.S. DISTRICT COURT  
7 WESTERN DISTRICT OF WASHINGTON

8 STRIKE 3 HOLDINGS, LLC, a Delaware  
9 corporation,

10 Plaintiff,

11 vs.

12 JOHN DOE, subscriber assigned IP  
13 address 73.225.38.130,

14 Defendant.

15 JOHN DOE subscriber assigned IP  
16 address 73.225.38.130,

17 Counterclaimant,

18 vs.

19 STRIKE 3 HOLDINGS, LLC,

20 Counterdefendant.

21  
22 NO. 2:17-cv-01731-TSZ

23 **DECLARATION OF MICHAEL  
24 YASUMOTO IN SUPPORT OF  
DEFENDANT'S SUPPLEMENTAL  
REPLY ON SUMMARY JUDGMENT**

25 I, Michael Yasumoto, declare as follows:

26 1. I have personal knowledge of the facts set forth in this declaration and could  
27 testify competently to them if called upon to do so.

28 2. I am an expert in the field of digital forensics and have been retained as an  
29 expert on hundreds of occasions. I have been designated as an Expert Witness in this case.

30 DECLARATION OF MICHAEL YASUMOTO IN  
31 SUPPORT OF DEFENDANT'S SUPPLEMENTAL REPLY  
32 ON SUMMARY JUDGMENT - 1  
33 CASE No. 2:17-cv-01731-TSZ

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1       3.     On every occasion that I have provided expert services in cases involving the  
 2 use of peer-to-peer networks, I have been asked to examine a storage device for files that are  
 3 associated with specific file hashes or complete file paths.

4       4.     The term “hash” refers to the use of a mathematical “hash function” using a file,  
 5 text, or any other data as input. One type of “hash function” is a “SHA1 hash”. The SHA1  
 6 algorithm outputs a 40-character hexadecimal value such as the ones listed in Exhibit A to the  
 7 Complaint (data in the “Hash” column).

8       5.     A “file hash” using the SHA1 algorithm is a 40-character hexadecimal value  
 9 derived from a file supplied as input. It can be used to uniquely identify a file and acts like a  
 10 digital fingerprint.

11      6.     When the file hash of a file located on storage media matches the hash of a  
 12 reference file, the file hash can be considered evidence of infringed works (in the copyright  
 13 context) or contraband (in the criminal context). For this reason, it is best practice in computer  
 14 forensics to calculate the hashes of the files on a storage device and then compare them against  
 15 a target set when looking for evidence of infringed works or contraband. For cases involving  
 16 contraband (e.g. child pornography), use of file hashes to determine if a file is contraband is  
 17 preferable, since comparing hashes is an automated process as opposed to examining all of the  
 18 files individually.

19      7.     While the Complaint describes several types of hashes, it only references file  
 20 hashes when talking about Strike 3’s calculation of specific hashes. Specifically, “A full copy  
 21 of each digital media file was downloaded from the BitTorrent file distribution network, and it  
 22 was confirmed through independent calculation that the file hash correlating to each file  
 23 matched the file hash downloaded by Defendant.” *See* Dkt. No. 1 at ¶ 26.

24      8.     Exhibit A to the Complaint includes a column titled “Hash”. The data contained  
 25 in the “Hash” column is the only reference in the Complaint to individual defined hash values.

1       9.     Strike 3 recently advised the Court that the Hashes listed in Exhibit A are not  
2 file hashes, but rather “info-hashes”. As defined in the bittorrent specification, “info-hash” (or  
3 infohash) is: *“The infohash is calculated by applying a hash function to the bencoded form of*  
4 *the info dictionary, which is a substring of the metainfo file. For meta version 2 SHA2-256 is*  
5 *used.”*

6       10.    “Info-hashes” carry limited forensic value as they are not calculated from the  
7 infringing work itself. As Strike 3 represented, info-hashes allegedly only help identify  
8 infringing files using a Google search. “Info-hashes” would not show that a defendant  
9 possessed all of a media file (as a file hash would).

10      11.    It is not the common practice in digital forensics to search for “Info-hashes”  
11 when the generic term “hash” is used. An unqualified use of the term “hash” when referring to  
12 files would almost always mean a hash of the file itself.

13      I declare under penalty of perjury under the laws of the United States of America that  
14 the foregoing is true and correct.

15      EXECUTED at Beaverton, Oregon, this 1st day of November 2019.

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18      \_\_\_\_\_  
19      Michael Yasumoto

**CERTIFICATE OF SERVICE**

I, Adrienne D. McEntee, hereby certify that on November 1, 2019, I electronically filed the foregoing with the Clerk of the Court using the CM/ECF system which will send notification of such filing to the following:

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DECLARATION OF MICHAEL YASUMOTO IN  
SUPPORT OF DEFENDANT'S SUPPLEMENTAL REPLY  
ON SUMMARY JUDGMENT - 4  
CASE NO. 2:17-cv-01731-TSZ

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14 DATED this 1st day of November, 2019.

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